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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/644,414 | 08/20/2003 | Paul H. Dietz | | 7933 |
| 22199 7590 05/13/2008 MITSUBISHI ELECTRIC RESEARCH LABORATORIES, INC. | | EXAMINER | | |
| 201 BROADWAY | | | ANTONIENKO, DEBRA L | |
| 8TH FLOOR CAMBRIDGE, MA 02139 | | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | Application No. | Applicant(s) | | | | |
|--|---|--|-----------------------|--|--|--|--|
| | | 10/644,414 | DIETZ ET AL. | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | |
| | | DEBRA ANTONIENKO | 4194 | | | | |
| Period fo | The MAILING DATE of this communication app or Reply | pears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | |
| Status | | | | | | | |
| 1) 又 | Responsive to communication(s) filed on 03 M | arch 2008 | | | | | |
| • | Responsive to communication(s) filed on <u>03 March 2008</u> . This action is FINAL . 2b) This action is non-final. | | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| ٥/١ | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Dispositi | ion of Claims | | | | | | |
| - | | ootion | | | | | |
| | Claim(s) <u>1-9, 11-18</u> is/are pending in the application. | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| · — | 5) Claim(s) is/are allowed. | | | | | | |
| · · | Claim(s) <u>1-9, 11-18</u> is/are rejected. | | | | | | |
| • | Claim(s) is/are objected to. | r cleation requirement | | | | | |
| اـــا(٥ | Claim(s) are subject to restriction and/o | r election requirement. | | | | | |
| Applicati | on Papers | | | | | | |
| 9) | The specification is objected to by the Examine | r. | | | | | |
| 10)🛛 | 10)⊠ The drawing(s) filed on <u>03/03/2008</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| | Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some color None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| 2) Notic 3) Inform | e of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ite | | | | |

DETAILED ACTION

1. The following is a Final Office Action in response to communications received March

3, 2008, wherein:

Claims 1, 7, 12, and 13 have been amended;

Claims 10 and 19 have been cancelled;

Claims 1-9 and 11-18 are pending.

Response to Amendment

2. Applicants' amendments to the drawings are sufficient to overcome the objections set forth in the previous Office Action.

3. Applicants' amendment to Claim 7 is sufficient to overcome the 35 U.S.C. 112, second paragraph rejection set forth in the previous Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It recites "slow" and "quick", which are relative terms, not clearly understood by one of ordinary skill in the art.

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Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-7, 9, and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Cohen-Solal et al., U.S. Patent Number 6,873,710 B1 (hereinafter referred to as Cohen-Solal).

Examiner's Note: The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Regarding Claim 1:

Cohen-Solel teaches a display system for enhancing a retail environment (Figure 1, item 100 and column 3, lines11-30), comprising:

a plurality of displays placed in a retail environment (column 1, lines 33-53 and column 3, lines 20-26);

a plurality of sensors placed in the retail environment, the sensors configured to acquire implicit characteristics of consumers (Figure 1, items 120-1 and 120-N, and column 2, lines 12-20);

a database storing content and implicit preference models (Figure 1, item 400 and column 2, lines 24-27); and

means for updating the displays with the content in real-time according to the implicit characteristics of the consumers and the implicit preference models (Figure 1, item 300 and column 3, lines 62-65), and

in which the updating is based on sensed shopping patterns of the consumers (column 4, lines 62-67).

Regarding Claim 2:

Cohen-Solel teaches the retail system of claim 1, in which components of the displays are selected from the group consisting of projectors, audio outputs, signages, controllable mannequins, models, scent generators, and combinations thereof (column 10, lines 10-16).

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Regarding Claim 3:

Cohen-Solel teaches the retail system of claim 1, in which the sensors are selected from the group consisting of proximity sensors, infrared sensors, microphones, thermal sensors, cameras, touch sensors, and motion sensors (column 3, lines 27-30).

Regarding Claim 4:

Cohen-Solel teaches the retail system of claim 1, further comprising: determining consumer behavior in a vicinity of the displays (column 4, lines 62-67); and means for updating the displays with the content in real-time according to the consumer behavior (column 1, lines 54-60).

Regarding Claim 5:

Cohen-Solel teaches the retail system of claim 1, in which the implicit consumer characteristics are selected from the group consisting of gender, height, weight, age, and race (column 3, lines 56-57).

Regarding Claim 6:

Cohen-Solel teaches the retail system of claim 1, in which the sensors acquire environmental data from the retail environment (column 4, lines 6-11).

Regarding Claim 7:

Cohen-Solel teaches the retail system of claim 6, in which the environmental data are selected from the group consisting of weather, traffic, time, date, pricing, and sales (column 4, lines 6-11).

Regarding Claim 9:

Cohen-Solel teaches the retail system of claim 1, in which the updating precludes an explicit identification of the consumers (column 2, lines 12-15).

Regarding Claim 13:

Cohen-Solel teaches the retail system of claim 1, in which the shopping pattern of a particular consumer is quick, slow, directed, or random (column 6, lines 50-56).

Quick and slow are functions of time just as determining a rate is a function of time. Therefore, if the rate is high, consumers are moving quickly. If the rate is low, consumers are moving slowly.

Regarding Claim 14:

Cohen-Solel teaches the retail system of claim 1, in which the content is displayed according to a history of interactions between the consumers and the retail environment (column 4, lines 62-67).

Regarding Claim 15:

Cohen-Solel teaches the retail system of claim 1, in which the content includes product information (column 5, lines 33-35).

Regarding Claim 16:

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Cohen-Solel teaches the retail system of claim 1, in which the content modifies an appearance of the retail environment (column 3, line 60 through column 4, line 5).

Changing display content, i.e. choosing one over the other is equivalent to modifying an appearance of the retail environment.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen-Solel in view of Baker, U.S. Patent Number 7,224,382 B2 (hereinafter referred to as Baker).

Regarding Claim 8:

As described above, Cohen-Solel teaches the limitations of the retail system of claim 1, but Cohen-Solel does not explicitly disclose in which the retail environment includes three-dimensional structural elements, and further comprising: means for projecting images on the three-dimensional structural elements.

However, Baker discloses in which the retail environment includes three-dimensional structural elements, and further comprising: means for projecting images on the three-dimensional structural elements (column 3, line 33; column 24, lines 51-64; and the Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Baker's three-dimensional capabilities into Cohen-Solel's method and apparatus for presenting information in order to present a wider variety of content for marketing.

Regarding Claim 18:

As described above, Cohen-Solel teaches the limitations of the retail system of claim 1, but Cohen-Solel does not explicitly disclose in which a particular display simulates multiple video monitors with a single projector.

However, Baker discloses in which a particular display simulates multiple video monitors with a single projector (column 3, line 33 and column 14, lines 24-32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Baker's multiple images in order to maximize the marketing efforts.

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8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen-Solel in view of Marcus, U.S. Patent Application Publication US 2002/0077902 A1 (hereinafter referred to as Marcus).

Regarding Claim 11:

As described above, Cohen-Solel teaches the limitations of the retail system of claim 1, but Cohen-Solel does not explicitly disclose in which the sensors acquire heart rates and breathing rates of the consumers.

However, Marcus discloses in which the sensors acquire heart rates and breathing rates of the consumers (page 11, [0164]-[0167]). Marcus suggests monitoring breathing rate based on the physiological relationship between heart and breathing rates, as in a polygraph.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Marcus' biometric data gathering in order to further determine consumer activity and response to marketing.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen-Solel in view of Brumitt, U.S. Patent Number 6,658,136 B1 (hereinafter referred to as Brumitt).

Regarding Claim 12:

As described above, Cohen-Solel teaches the retail system of claim 1, but Cohen-Solel does not explicitly disclose determining trajectories of consumers in the retail environment to obtain the shopping patterns of the consumers in the retail environment.

However, Brumitt discloses determining trajectories of consumers (column 1, lines 41-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Brumitt's tracking capabilities in the retail environment in order to further determine consumer activity.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen-Solel in view of Hannigan et al., U.S. Patent Number 5,902,032 (hereinafter referred to as Hannigan).

Regarding Claim 17:

As described above, Cohen-Solel teaches the limitations of the retail system of claim 1, but Cohen-Solel does not disclose in which a particular display simulates theatrical lighting.

However, Hannigan discloses in which a particular display simulates theatrical lighting (column 1, lines 5-15 and column 3, lines 30-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Hannigan's lighting techniques in order to maximize the marketing displays.

Response to Arguments

11. Applicants' arguments filed March 3, 2008 have been fully considered but they are not persuasive.

12. With respect to the limitation of Claim 10, currently amended to Claim 1, "paying attention to the presented advertising or information" does indeed influence consumers' shopping patterns. As Applicants suggest in newly claimed Claim 13, if consumers are moving slowly, they are looking at something or considering something, for example, taking note of advertising. Therefore, the Examiner maintains that Cohen-Solel does teach this limitation; Claim 1 recites no limitation which sets out a particular "shopping pattern" that distinguishes over "paying attention". Broadly read. "paying attention" is a shopping pattern.

As to the argument regarding claims 12-13, see the rejection set forth above, which cites the disclosure of the newly claimed limitations in Cohen-Solel.

13. With respect to Claim 16, the limitations do not include a change in background scenery as disclosed in the specification. Also, in light of modifying the appearance of the retail environment to create a different mood or ambiance, it is a contradiction to assert that "the content of an advertisement has nothing to do with the environment," as

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establishing a particular environment is very much part of advertising and marketing.

Therefore, the Examiner maintains that Cohen-Solel does teach this limitation.

The content of an advertisement is a part of the visual environment and as such is intimately related to the environment.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBRA ANTONIENKO whose telephone number is (571)270-3601. The examiner can normally be reached on Monday through Friday, 7:30 AM to 5:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on 571-272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Debra Antonienko/ Examiner, Art Unit 4194 05/12/2008

/Charles R. Kyle/ Supervisory Patent Examiner, Art Unit 4194